



THE CITY OF SAN DIEGO

MINIMUM STANDARDS FOR

# Renewal of Roof Covering

CITY OF SAN DIEGO DEVELOPMENT SERVICES

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BULLETIN

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This information bulletin is intended to clarify the roofing requirements for the renewal of roof coverings for buildings located in the City of San Diego. It provides guidance to when a building permit is required.

## I. WHEN IS A BUILDING PERMIT REQUIRED?

A. A building permit may not be required for the renewal of roof coverings on most types of buildings if they are replaced with the same material.

Section 129.0203 of the SDMC exempts the renewal of roof coverings on any building from a building permit. Subsection (d) clarifies that exemption from the permit requirements of the Building Regulations does not authorize any work to be done in any manner in violation of the provisions of the building regulations or any other applicable local or state regulations. Roof covering replacement must comply with the building code requirements even though a permit may not be required.

B. Where new roof sheathing is being installed solely as a backing material for new roof covering, such new sheathing installation is exempt from a building permit.

C. A building permit is required for the replacement of roof covering when one or more of the following conditions apply:

1. The evaluation by a design professional, i.e. registered architect or a professional engineer, requires a structural upgrade to the existing roof structure.
2. The roof covering replacement requires the replacement of damaged structural framing members.
3. The additional dead load for roof replacement, on sloped roofs (slope more than 2:12) and where asphalt shingles or wood roof coverings are replaced with light weight tile roofing systems, is six pounds per square foot or more.

The additional dead load may include the weight of the proposed roofing assembly, including any new additional plywood underlayment.

## Documents Referenced in this Information Bulletin

- 2007 California Building Code, (CBC)
- San Diego Municipal Code, (SDMC)
- [Project Submittal Manual](#)
- Information Bulletin 124, Minimum Construction Standards for Proximity to Hazardous Vegetation
- Information Bulletin 125, Minimum Construction Standards for Very High Fire Severity Hazard Zone
- [Information Bulletin 203](#), How to Obtain No-Plan Permit
- [Information Bulletin 580](#), Potential Historical Resource Review
- [Information Bulletin 581](#), Designated Historical Resources Review
- [Nonresidential Compliance Manual For California's 2005 Energy Efficiency Standards](#)
- [Residential Compliance Manual For California's 2005 Energy Efficiency Standards](#)

D. A building permit is required when the roof framing members, roof sheathing, lateral load resisting elements, or foundations are modified, altered or otherwise revised as a result of the new roof covering. Structural calculations shall be submitted to justify the adequacy of the roof framing members, and lateral resisting elements such as shear walls and foundations.

## II. HISTORICAL REVIEW

If the structure is 45 years or older on any parcel affected by your project, then it is subject to Potential Historical Review. If your project involves any parcel with a designated historical resource, or is located within the boundaries of an adopted historic district, then it is subject to Designated Historical Review. Please refer to Information Bulletin 580, "Potential Historical Resource Review," and Information Bulletin 581, "Designated Historical Resource Review."

## III. VERY HIGH FIRE HAZARD SEVERITY ZONES OR BRUSH MANAGEMENT ZONES

The re-roofing of structures located in a Very

High Fire Hazard Severity Zones, 300 buffer zones or Brush Management Zones, governed by the City of San Diego's Brush Management Ordinance, may need to meet additional fire protection requirements. Please refer to Information Bulletin 124 and 125 .

#### IV. ENERGY EFFICIENCY STANDARDS

The requirements of the 2005 Building Energy Efficiency Standards (BEES) may apply when:

1. A building permit is required per Section I (C) above and replacement of a roof covering over conditioned (heating or A/C) space.
2. Re-roofs involving more than a 50% tear off of the existing roof, or more than 2,000 square feet, whichever is less, shall meet the requirements for alterations to building envelopes (Nonresidential Section 3.9.3.)
3. Re-roofing of rock or gravel surfaced roofs that meet five prescribed conditions in Section 149 (b) 1B are not regulated by Nonresidential Compliance Manual For California's 2005 Energy Efficiency Standards.

#### V. BUILDING CODE REQUIREMENTS

A roofing assembly must be classified, as defined in Section 1502 of the 2007 California Building Code (CBC), and includes the roof deck, substrate or thermal barrier, insulation, vapor retarder, underlayment, interlayment, base plies, roofing plies, and roof covering. All roofing assemblies must be fire retardant.

Sections 145.1505, 145.1507 and 145.1510 of SDMC have amended Chapter 15 of CBC. Section 145.1510 requires a higher level of fire resistance than the CBC. The requirements apply to all occupancies and buildings.

The "Local Modifications to the Requirements of the 2007 California Building Code" are as follows:

1. A minimum class "A" roofing assembly for all new roofs and re-roof projects.
2. All replacements, alterations, or repairs shall be a Class "A" roofing assembly.
3. The entire roof shall be a Class "A" roofing assembly where more than 25 percent of the total roof area is replaced, altered or repaired within any 12 month period.
4. Wood shakes and shingles are prohibited throughout the roof where more than 25 percent of the total roof area is replaced, altered or repaired within any 12 month period.
5. Wood shakes and shingles are not permitted, except as provided for in the State Historical Building Code Section 8-408 and Section 145.1510.

6. No roof covering shall be applied over any existing wood shakes or wood shingles.

#### A. ELEVATED DECK STRUCTURES

Compliance with roofing/re-roofing code requirements for elevated deck structures covered with open wood decking materials shall follow the following guidelines:

1. Detached deck structures with a projected area of 300 square feet or less, or attached deck with open decking are exempt from the roofing assembly requirements.
2. Solidly sheathed attached/detached deck structures with a projected area of more than 300 square feet, shall comply with the Class "A" roofing assembly requirement.
3. Solidly sheathed deck structures covered with noncombustible floor tile systems may be considered to comply with the roofing assembly requirements.
4. Occupied roofs located above occupied interior spaces shall comply with the Class "A" roofing assembly requirement.

#### B. PATIO COVERS AND SOLARIUMS

Patio covers that are covered with open framework providing shade protection are exempt from these requirements.

1. Detached patio covers, that are accessory to residential buildings and with a projected roof area of 300 square feet or less are exempt from the City's Class A roofing assembly requirement.
2. Attached open patio covers with a projected roof area of more than 300 square feet shall be covered with a Class A roofing assembly.
3. Attached open patio covers with a projected roof area of 300 square feet or less may be covered with a Class B roofing assembly. Light transmitting roof panels shall comply with Chapter 26 of the 2007 California Building Code.
4. Pre-fabricated or pre-manufactured patio covers that are approved in a research report by a recognized listing agency shall comply with the City of San Diego roof assembly requirements.

#### C. MATERIAL

Roof coverings shall be applied in accordance with chapter 15 of the CBC and the manufacturer's installation instructions, or in accordance with a current product listing

report (ICC-ES, UL or equivalent) for listed assemblies. Information provided for roof covering installations in the 2007 CBC chapter 15 Section 1507 are:

- ASPHALT SHINGLES
- CLAY OR CONCRETE TILE
- METAL ROOF PANELS
- METAL ROOF SHINGLES
- MINERAL-SURFACED ROLL ROOFING
- SLATE SHINGLES
- BUILT-UP ROOFS
- OTHER LISTED ROOF COVERING PRODUCTS

Roof-covering materials shall be delivered in packages bearing the manufacturer's identifying marks and approved testing agency labels required in accordance with Section 1505 of the CBC.

#### **D. DRAINAGE**

Re-roofing shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 for roofs that provide positive roof drainage (CBC 1510.1).

#### **E. STRUCTURAL AND CONSTRUCTION LOADS**

The structure of the roof framing system shall be capable of supporting the roof-covering system and the material and equipment loads that will be encountered during installation of the system (CBC 1510.2).

When removing old roofing materials or gravel, avoid stock piling of materials in one area, so as to not overload the roof structure. Also, when loading new materials onto the roof, distribute them evenly to avoid any concentrated loads.

#### **F. RECOVERING VERSUS REPLACEMENT**

New roof coverings shall not be installed without first removing all existing layers of roof coverings where any of the following conditions occur (CBC 1510.3):

1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
2. Where the existing roof covering is wood shake, wood shingles, slate, clay, and cement or asbestos-cement tile.
3. Where the existing roof has two or more applications of any type of roof covering.

#### **G. REINSTALLATION OF MATERIALS**

Existing slate, clay or cement tile shall be permitted for reinstallation, except that damaged, cracked or broken slate or tile shall not be reinstalled. Existing vent flashing, metal edgings, drain outlets, collars and metal counter flashings shall not be reinstalled where rusted, damaged or deteriorated. Aggregate surfacing materials shall not be reinstalled (CBC 1510.5).

Flashings shall be reconstructed in accordance with approved manufacturer's installation instructions. Metal flashing, to which bituminous materials are to be adhered, shall be primed prior to installation (CBC 1510.6).

#### **H. SPARK ARRESTERS**

Spark arresters shall be installed at chimney tops on wood burning fire places when new roofing is installed (CBC 2113.9.1)

#### **I. FRAMING AROUND FLUES AND CHIMNEYS**

Combustible framing shall be a minimum of two inches, but shall not be less than the distance specified in Sections 2111.11 and 2113.19 of the CBC and the 2007 California Mechanical Code, from flues, chimneys and fireplaces, and six inches away from flue openings (CBC 2304.5)

#### **J. ATTIC VENTILATION**

Attic ventilation must comply with minimum code requirements. Screened openings shall not be blocked or painted shut (CBC 1203.2).

### **VI. INSTALLATION OF NEW PLYWOOD UNDER-LAYMENT**

Where new roof sheathing is being installed solely as a backing material such new sheathing, installation is exempt from a building permit. New wood structural panel roof sheathing, such as plywood or oriented-strand-board (OSB) sheathing, shall be fastened directly to roof framing members below or to the existing roof sheathing materials such as spaced "skip" sheathing. In addition, the following conditions must be met:

1. The new sheathing material should have the narrow edges fully supported on the roof framing members (rafters or trusses).
2. Nails or staples should provide full penetration into the roof framing system.
3. CBC Table 2304.9.1 requires 8d common nails to fasten roof sheathing to the underlying framing. Pneumatically driven (gun) nails require two inches of penetration into fram-

ing members. There should be no “shiners” through spaced sheathing.

4. Listed staples may also be used in lieu of common 8d nails.
5. Staples shall be galvanized.
6. The staple crown shall be a minimum of 7/16 inches.

## **VII. OPTIONS FOR SERVICE**

- A. Repair/replacement in kind may be issued for roof structure alterations, such as the replacement in kind of plywood over existing skip sheathing. No plan permits may be approved at screening counter while the customer is present on the third floor of Development Services Department. A copy of the original approved building plans from the record are required to qualify for repair in kind permits. Refer to Information Bulletin 203 for more information on repair in kind permits.
- B. If the roof framing members, roof sheathing, lateral resisting elements on residential building are modified or altered, per conventional light frame construction requirements, chapter 23 of the 2007 CBC, re-roofing plans may be reviewed and approved over the counter on the third floor at over the counter combined review.
- C. Any roof framing alterations or modifications to commercial or residential buildings which do not comply with conventional light frame construction, Section 2308 of the CBC, shall be designed by a registered Architect or Engineer licensed in the State of California. All such plans, details and calculations shall be signed, stamped and dated by a registered Architect or Engineer, and must be submitted for plan review. Please refer to Project Submittal Manual Section A and 2A.